



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/611,786	06/30/2003	Jeremy L. Rover	42P17063	1320
59796	7590	10/18/2007		
INTEL CORPORATION c/o INTELLEVATE, LLC P.O. BOX 52050 MINNEAPOLIS, MN 55402			EXAMINER NGUYEN, THUONG	
			ART UNIT 2155	PAPER NUMBER
			MAIL DATE 10/18/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/611,786

Applicant(s)

ROVER ET AL.

Examiner

Thuong (Tina) T. Nguyen

Art Unit

2155

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 June 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 5/9/07, 12-11-06, 2-3-06, 2-10-06
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This action is in response to application 10/611,786 filed 6/30/03. Claims 1-25 are pending and represent system and method for the design and description of networks.

Specification

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 6 & 19 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It's unclear to the examiner what is the starting position on the network indicate? Listing the starting point for the listed node or what? How do you determined that?

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 5-9, 11-13, 15-21, 23-24 are rejected under 35 U.S.C. 102(e) as being anticipated by Solomon Patent No. 2003/0112808 A1. Solomon teaches the invention as claimed including automatic configuration of IP tunnels (see abstract).

7. As to claim 1, Solomon teaches a method for describing a network comprising:
categorizing a subnet into a subnet grouping, wherein subnets within a subnet grouping can route to one another (figure 1 & 5; page 1, paragraph 5-6; page 7, paragraph 91; Solomon discloses that the method of classified the subnets into different groups);

providing a subnet subsection for the subnet within the categorized subnet grouping (figure 3; page 2, paragraph 9; page 7, paragraph 86; Solomon discloses that the method of listing the routing information for each group of subnets); and

specifying a network topology type section in the provided subnet subsection (page 3, paragraph 23; page 8, paragraph 93; Solomon discloses that the method of mapping the topology to the specific subnets or hosts).

Art Unit: 2155

8. As to claim 5, Solomon teaches the method as recited in claim 1, wherein providing a list of nodes, the list including at least one node (page 3, paragraph 21; page 8, paragraph 95; Solomon discloses that the method of listing of all the subnets and addresses corresponding to the table).

9. As to claim 6, Solomon teaches the method as recited in claim 5, wherein providing the list of nodes further comprises providing a starting position on the network for the listed node (figure 1).

10. As to claim 7, Solomon teaches the method as recited in claim 5, wherein providing the list of nodes comprises providing the list of nodes within the specified network topology type subsection (figure 4; page 8, paragraph 94; Solomon discloses that the method of mapping the listing of the subnets with the topology).

11. As to claim 8, Solomon teaches the method as recited in claim 1, wherein categorizing the subnet into a subnet grouping comprises categorizing the subnet into an internal subnet grouping or an external subnet grouping (page 3, paragraph 23; Solomon discloses that the method of mapping table of all the external subnets within the network).

12. As to claim 9, Solomon teaches the method as recited in claim 8, comprises:
placing the subnet in the external subnet grouping, if the subnet is associated with an external interface of a Virtual Private Network (VPN) (page 2, paragraph 10; Solomon discloses that the method of using the VPN to control the access and encryption); and

placing the subnet in the internal subnet grouping, if subnet is associated with an internal interface of the VPN (page 2, paragraph 11; Solomon discloses that the method of configuring the VPN and the tunnels for the system).

13. As to claim 11, Solomon teaches a network comprising:

a first network component to receive a request for a network configuration figure 4 & 7); and

a second network component in electrical communication with the first network component to provide the request for the network configuration, the second network component having a processor and logic executable thereon to

categorize a subnet into a subnet grouping, wherein subnets within a subnet grouping can route to one another (figure 1 & 5; page 1, paragraph 5-6; page 7, paragraph 91; Solomon discloses that the network of classified the subnets into different groups);

provide a subnet subsection for the subnet within the categorized subnet grouping (figure 3; page 2, paragraph 9; page 7, paragraph 86; Solomon discloses that the network of listing the routing information for each group of subnets); and

specify a network topology type subsection in the provided subnet subsection (page 3, paragraph 23; page 8, paragraph 93; Solomon discloses that the network of mapping the topology to the specific subnets or hosts).

14. As to claim 12, Solomon teaches the network as recited in claim 11, wherein the second network component having the processor and logic executable thereon further comprises logic executable thereon to: provide a list of nodes, the list including at least

Art Unit: 2155

one node (page 3, paragraph 21; page 8, paragraph 95; Solomon discloses that the network of listing of all the subnets and addresses corresponding to the table).

15. As to claim 13, Solomon teaches the network as recited in claim 12, wherein to provide the list of nodes comprises to provide the list of nodes within the specified network topology type subsection (figure 4; page 8, paragraph 94; Solomon discloses that the network of mapping the listing of the subnets with the topology).

16. As to claim 15, Solomon teaches the network as recited in claim 11, wherein the second network component is a control node (page 3, paragraph 25; Solomon discloses that the network of listing all the list of active nodes and remote nodes for controlling the packet transmission).

17. As to claim 16, Solomon teaches an article of manufacture comprising:

categorize a subnet into a subnet grouping, wherein subnets within a subnet grouping can route to one another (figure 1 & 5; page 1, paragraph 5-6; page 7, paragraph 91; Solomon discloses that the article of classified the subnets into different groups);

provide a subnet subsection for the subnet within the categorized subnet grouping (figure 3; page 2, paragraph 9; page 7, paragraph 86; Solomon discloses that the article of listing the routing information for each group of subnets); and

specify a network topology type subsection in the provided subnet subsection (page 3, paragraph 23; page 8, paragraph 93; Solomon discloses that the article of mapping the topology to the specific subnets or hosts).

Art Unit: 2155

18. As to claim 17, Solomon teaches the article of manufacture as recited in claim 16, wherein provide a list of nodes, the list to include at least one node (page 3, paragraph 21; page 8, paragraph 95; Solomon discloses that the article of listing of all the subnets and addresses corresponding to the table).

19. As to claim 18, Solomon teaches the article of manufacture as recited in claim 17, wherein the electronically accessible medium providing instructions, that, when executed by the apparatus, cause the apparatus to provide a list of nodes cause the apparatus to provide the list of nodes within the specified network topology type subsection (figure 4; page 8, paragraph 94; Solomon discloses that the article of mapping the listing of the subnets with the topology).

20. As to claim 19, Solomon teaches the article of manufacture as recited in claim 17, wherein the electronically accessible medium providing instructions that, when executed by the apparatus, cause the apparatus to provide the list of nodes, the list to include at least one node, cause the apparatus to provide a start position on the network for the listed node (figure 1).

21. As to claim 20, Solomon teaches the article of manufacture as recited in claim 17, wherein the electronically accessible medium providing instructions that, when executed by the apparatus, cause the apparatus to categorize the subnet into a subnet grouping, cause the apparatus to categorize the subnet into an internal subnet grouping or an external subnet grouping (page 3, paragraph 23; Solomon discloses that the article of mapping table of all the external subnets within the network).

Art Unit: 2155

22. As to claim 21, Solomon teaches the article of manufacture as recited in claim 16, wherein:

place the subnet in the external subnet grouping, if the subnet is associated with an external interface of a Virtual Private Network (VPN) (page 2, paragraph 10; Solomon discloses that the article of using the VPN to control the access and encryption); and

place the subnet in the internal subnet grouping, if subnet is associated with an internal interface of the VPN (page 2, paragraph 11; Solomon discloses that the article of configuring the VPN and the tunnels for the system).

23. As to claim 23, Solomon teaches a network comprising:

a first network component to receive a description of a configured network (figure 4 & 7); and

a second network component in electrical communication with the first network component to provide the description of the configured network, the second network component having a processor and logic executable thereon to

categorize a subnet into a subnet grouping, wherein subnets within a subnet grouping can route to one another (figure 1 & 5; page 1, paragraph 5-6; page 7, paragraph 91; Solomon discloses that the network of classified the subnets into different groups);

provide a subnet subsection for the subnet within the categorized subnet grouping (figure 3; page 2, paragraph 9; page 7, paragraph 86; Solomon discloses that the network of listing the routing information for each group of subnets);

specify a network topology type subsection in the provided subnet subsection (page 3, paragraph 23; page 8, paragraph 93; Solomon discloses that the network of mapping the topology to the specific subnets or hosts); and

provide a list of nodes within the specified network topology type subsection (page 3, paragraph 21; page 8, paragraph 95; Solomon discloses that the network of listing of all the subnets and addresses corresponding to the table).

24. As to claim 24, Solomon teaches the network as recited in claim 23, wherein the first network component is a control node (page 3, paragraph 25; Solomon discloses that the network of listing all the list of active nodes and remote nodes for controlling the packet transmission).

Claim Rejections - 35 USC § 103

25. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

26. Claims 2-4, 10, 14, 22 & 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Solomon, Patent No. 2003/0112808 A1 in view of Hoskins, Patent No. 2003/0106067 A1.

Solomon teaches the invention substantially as claimed including automatic configuration of IP tunnels (see abstract).

Art Unit: 2155

27. As to claim 2, Solomon teaches the method as recited in claim 1. But Solomon failed to teach the claim limitation wherein specifying the network topology type section for the established subnet subsection comprises: specifying that the subnet is to be supported by a topology that is compliant with the IEEE 802.3 standard.

However, Hoskins teaches integrated Internet protocol (IP) gateway services in an RF cable network (see abstract). Hoskins teaches the limitation wherein specifying the network topology type section for the established subnet subsection comprises: specifying that the subnet is to be supported by a topology that is compliant with the IEEE 802.3 standard (page 13, paragraph 109).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Solomon in view of Hoskins so that the system would be able to develop some wireless local area network. One would be motivated to do so to define several different physical layers including frequency hopping and baseline.

28. As to claim 3, Solomon teaches the method as recited in claim 1. But Solomon failed to teach the claim limitation wherein specifying the network topology type section for the established subnet subsection comprises: specifying that the subnet is to be supported by a topology that is compliant with the IEEE 802.11a standard.

However, Hoskins teaches the limitation wherein specifying the network topology type section for the established subnet subsection comprises: specifying that the subnet is to be supported by a topology that is compliant with the IEEE 802.11a standard (page 12, paragraph 100).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Solomon in view of Hoskins so that the system would be able to develop some wireless local area network. One would be motivated to do so to define several different physical layers including frequency hopping and baseline.

29. As to claim 4, Solomon teaches the method as recited in claim 1. But Solomon failed to teach the claim limitation wherein specifying the network topology type section for the established subnet subsection comprises: specifying that the subnet is to be supported by a topology that is compliant with the IEEE 802.11b standard.

However, Hoskins teaches the limitation wherein specifying the network topology type section for the established subnet subsection comprises: specifying that the subnet is to be supported by a topology that is compliant with the IEEE 802.11b standard (page 12, paragraph 100).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Solomon in view of Hoskins so that the system would be able to develop some wireless local area network. One would be motivated to do so to define several different physical layers including frequency hopping and baseline.

30. As to claim 10, Solomon teaches the method as recited in claim 8. But Solomon failed to teach the claim limitation wherein placing the subnet in the external subnet grouping (page 2, paragraph 10), if the subnet is to be associated with a non-secure interface of a firewall; and placing the subnet in the internal subnet grouping (page 2, paragraph 10), if the subnet is to be associated with a non-secure interface of a firewall.

However, Hoskins teaches the limitation wherein placing the subnet in the external subnet grouping, if the subnet is to be associated with a non-secure interface of a firewall; and placing the subnet in the internal subnet grouping, if the subnet is to be associated with a non-secure interface of a firewall (page 25, paragraph 195).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Solomon in view of Hoskins so that the system to ensure the non-secure interface for the firewall. One would be motivated to do so to increase the security for the network.

31. As to claim 14, Solomon teaches the network as recited in claim 11. But Solomon failed to teach the claim limitation wherein the first network component is a Dynamic Host configuration Protocol (DHCP) server.

However, Hoskins teaches the limitation wherein the first network component is a Dynamic Host configuration Protocol (DHCP) server (page 25, paragraph 195).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Solomon in view of Hoskins so that the system automatically assign temporary IP address. One would be motivated to do so to eliminate having to manually assign static IP addresses.

32. As to claim 22, Solomon teaches the article of manufacture as recited in claim 16. But Solomon failed to teach the claim limitation wherein place the subnet in the external subnet grouping (page 2, paragraph 10), if the subnet is associated with a non-secure interface of a firewall; and place the subnet in the internal subnet grouping (page 2, paragraph 10), if the subnet is associated with a secure interface of a firewall.

However, Hoskins teaches the limitation wherein place the subnet in the external subnet grouping, if the subnet is associated with a non-secure interface of a firewall; and place the subnet in the internal subnet grouping, if the subnet is associated with a secure interface of a firewall (page 25, paragraph 195).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Solomon in view of Hoskins so that the system to ensure the non-secure interface for the firewall. One would be motivated to do so to increase the security for the network.

33. As to claim 25, Solomon teaches the network as recited in claim 23. But Solomon failed to teach the claim limitation wherein the second network component is a Dynamic Host Configuration (DHCP) server.

However, Hoskins teaches the limitation wherein the second network component is a Dynamic Host Configuration (DHCP) server (page 25, paragraph 195).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Solomon in view of Hoskins so that the system automatically assign temporary IP address. One would be motivated to do so to eliminate having to manually assign static IP addresses.

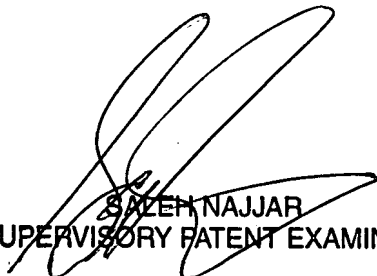
Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tina Nguyen whose telephone number is 571-272-3864, and the fax number is 571-273-3864. The examiner can normally be reached on 8:00 AM-5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached on 571-272-4006. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thuong (Tina) Nguyen
Patent Examiner/Art Unit 2155


SALEH NAJJAR
SUPERVISORY PATENT EXAMINER